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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/588,016   | 08/01/2006  | Friedbert Wechs      | 2037.6              | 2114             |
| 29494 7590 02/24/2010<br>HAMMER & ASSOCIATES, P.C.<br>3125 SPRINGBANK LANE<br>SUITE G<br>CHARLOTTE, NC 28226 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| BASS, DIRK R   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 1797   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/588,016

**Applicant(s)**

WECHS, FRIEDBERT

**Examiner**

DIRK BASS

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's request for continued examination filed January 21, 2010 is acknowledged. Claims 1 and 12 are amended and claims 17-18 are newly added. Claims 1-12 and 14-18 are pending and further considered on the merits.

#### ***Response to Amendment***

In response to applicant's amendment, the examiner modifies the grounds of rejection set forth in the office action dated July 24, 2009.

#### ***Claim Rejections - 35 USC § 102/103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 1-12 and 14-18** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scholander et al., US 5840190 (Scholander).
3. Regarding claims 1-4, 7-9, and 17, Scholander discloses a method for forming a membrane with at least one separating layer and a supporting layer (abstract, col. 3, l. 66 – col. 4, l. 32, and col. 4, l. 38 - col. 5, l. 10) comprising:
  - a. Preparation of a solution comprising either a cellulosic or polysulfonic membrane forming polymer and solvent system (col. 4, l. 38-50);
  - b. Conversion of the solution by means of a forming device into a shaped object with a first and a second surface (implicitly disclosed in col. 4, l. 38-50);
  - c. Bringing of the first and/or second surface in contact with a precipitant system comprising a polyelectrolyte, wherein the polyelectrolyte is acrylic acid (col. 4, l. 51-66) resulting in the formation of a membrane having a separating layer on the first and/or second surface (implicitly disclosed); and
  - d. Washing of the membrane (col. 5, l. 8-10).
4. While Scholander fails to explicitly disclose the above method using a spinning technique, Scholander teaches that the membranes can be formed using casting, spinning, or similar methods (col. 4, l. 26-28). Scholander further teaches an example of preparing a spinning solution (Ex. 8) in which spinning techniques are used to form hollow fiber membranes. In light of this evidence, it would have been obvious to one

skilled in the art to use a spinning technique since the examiner takes official notice of the equivalence of spinning techniques and casting techniques for their use in the membrane formation art and the selection of any of these known equivalents to form a membrane would be within the level of ordinary skill in the art (MPEP 2144.06).

5. Regarding claims 5-6, Scholander discloses a method characterized in that the proportion by weight of the polyelectrolyte relative to the weight of the precipitant system is 0.05 to 1 wt% (col. 4, l. 55-57).

6. Regarding claims 10-11, while Scholander fails to explicitly disclose the above method using a spinning technique comprising a hollow fiber die forming device, Scholander teaches that the membranes can be formed using casting, spinning, or similar methods (col. 4, l. 26-28). Scholander further teaches an example of preparing a spinning solution (Ex. 8) in which spinning techniques are used to form hollow fiber membranes.

7. At the time of invention, it would have been obvious to one skilled in the art to use a spinning technique since the examiner takes official notice of the equivalence of spinning techniques and casting techniques for their use in the membrane formation art and the selection of any of these known equivalents to form a membrane would be within the level of ordinary skill in the art (MPEP 2144.06).

8. Regarding claims 12 and 14, Scholander is relied upon in the rejections of claims 1 and 10-11 as set forth above.

9. Regarding claims 15-16, The limitations "wherein the membrane being for..." are deemed to be statements with regard to the intended use and are not further limiting in so far as the steps of the method are concerned. In process claims, a claimed intended use must result in a **manipulative difference** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

10. Regarding claim 18, Scholander is relied upon in the rejection of claims 1-4 as set forth above.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-12 and 14-18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIRK BASS whose telephone number is (571) 270-7370. The examiner can normally be reached on Mon - Fri (9am-4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797

/DRB/  
Dirk R. Bass